

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

IN THE CLAIMS

We claim:

1. (currently amended) A revetment block, comprising:

a substantially rectangular block having a top and a bottom surface;
a first and a second end extending vertically between said top and bottom surfaces; and,
first and second sidewalls each having at least one vertical surface and inwardly and
outwardly extending transition surfaces between said top and said bottom surface.

2. (original) The revetment block of claim 1, wherein said first and said second sidewall and
said transition surfaces define an interlock extending outwardly normal to said at least one
vertical surface.

3. (original) The revetment block of claim 1, wherein said first and second ends are
substantially parallel and said sidewalls are substantially parallel.

4. (original) The revetment block of claim 1 further comprising a first and a second aperture
extending from said top surface through said block.

5. (original) The revetment block of claim 4, wherein said first and said second aperture have
first and second tapered walls and wherein an upper portion of said apertures is larger than a
lower portion of said apertures.

6. (original) The revetment block of claim 1 further comprising a dome extending from said
revetment block top surface.

7. (original) The revetment block of claim 6, said dome having a curvilinear wall extending
from said top surface to a dome top surface.

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

- 103 8. (original) The revetment block of claim 1 having a plurality of ducts extending through said revetment block.
- 103 9. (original) The revetment block of claim 8 said plurality of ducts extending from said first end to said second end of said revetment block.
- 103 10. (currently amended) A revetment block, comprising:
- a substantially rectangular block having a top and a bottom surface;
 - first and second ends extending vertically between said top and bottom surfaces;
 - a first and a second sidewall each having at least one inclined transition surface between a plurality of vertical surfaces;
 - said first and second sidewall having a first and a second corner space defining an interlock, said interlock extending from said first and said second sidewall normal to said plurality of vertical surfaces; and,
 - a dome extending from said top surface and having curvilinear walls.
11. (original) The revetment block of claim 10, wherein said first and second ends are substantially parallel and said sidewalls are substantially parallel.
12. (original) The revetment block of claim 10 further comprising a first and a second aperture extending from said dome upper plateau through said bottom surface of said block.
13. (original) The revetment block of claim 10, wherein said first and said second aperture have first and second tapered walls and wherein an upper portion of said apertures is larger than a lower portion of said apertures.
14. (original) The revetment block of claim 10 having a plurality of ducts extending through

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

said revetment block.

15. (original) The revetment block of claim 14 said plurality of ducts extending from said first end to said second end of said revetment block.

16. (original) The revetment block of claim 10 said sidewall having transition surfaces extending between upper and lower vertical surfaces.

17. (currently amended) A revetment mat, comprising:

a plurality of revetment blocks having sidewalls including interlocks extending from said sidewalls and corner spaces in said revetment blocks;

at least two of said sidewalls being opposed sidewalls, said opposed sidewalls each having inwardly and outwardly extending transition surfaces defining said interlocks;

said interlocks engaging said corner spaces of blocks of an adjacent row;

a mattress formed of a plurality of rows of said revetment blocks in a running bond configuration.

18. (original) The revetment mat of claim 17 further comprising at least one cable extending through said rows of said mattress.

19. (original) The revetment block of claim 17 wherein said mattress further comprises half-size revetment blocks on alternating rows.

20. (currently amended) A revetment block, comprising:

a substantially rectangular revetment block having tapered interlocks extending from a first and a second sidewall;

said tapered interlocks defining corner spaces having vertical and inclined transition

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

surfaces therein;

said interlocks and corner spaces being sized to operably engage adjacent rows of
revetment blocks and form a revetment mattress.

21. (original) The revetment block of claim 20 having apertures extending from a top surface to
a bottom surface.

22. (original) The revetment block of claim 20 having a plurality of ducts extending from a first
end to a second end of said revetment block.

23. (original) The revetment block of claim 20 having a dome extending from a top surface.

24. (original) The revetment block of claim 23, said dome having curvilinear walls.

25. (currently amended) A revetment block, comprising:

a substantially rectangular block having a top and a bottom surface;

a first and a second end extending vertically between said top and said bottom surface;

a first and a second sidewall each having at least one vertical surface and inwardly and
outwardly ~~extending~~ inclined transition surfaces between said top and said bottom surface;

said first and said second sidewall each having at least one tapered interlock extending
from said at least one vertical surface.

26. (original) The revetment block of claim 25 wherein said first and said second end are
substantially parallel and wherein said first and said second sidewall are substantially parallel.

27. (original) The revetment block of claim 26 wherein a first and a second aperture extend
from said top surface and through said bottom surface.

28. (original) The revetment block of claim 25 further comprising ducts extending from said

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

first end to said second end.

29. (original) The revetment block of claim 25 further comprising a dome extending from said top surface.

30. (currently amended) A revetment block, comprising:

a substantially rectangular block having a top and bottom surface;

a first and a second end extending vertically between said top and said bottom surface;

first and second sidewalls each having a plurality of vertical surfaces and inwardly and outwardly ~~extending~~ inclined surfaces between said plurality of vertical surfaces;

AI said sidewalls each having at least one interlock extending in a tapered manner from said at least one vertical surface; and,

a dome extending from said top surface.

31. (original) The revetment block of claim 30, further comprising a plurality of corner spaces defined by said tapered interlock, each of said plurality of corner spaces having a transition surface and a vertical surface therein.

32. (original) The revetment block of claim 30 further comprising a first and a second aperture having at least two tapered walls.

33. (original) The revetment block of claim 30 having a plurality of ducts extending between said first and said second end.

34. (currently amended) A revetment block, comprising:

a substantially rectangular revetment block having tapered interlocks extending from a first and a second sidewall;

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

said first and second sidewalls having inwardly and outwardly inclined transition

surfaces;

said tapered interlocks defining corner spaces having tapered and vertical surfaces

therein;

said interlocks and corner spaces being sized to operably engage revetment blocks of adjacent rows and form a revetment mattress.

35. (currently amended) A revetment mat, comprising:

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a plurality of revetment blocks having first and second sidewalls, said sidewalls having inwardly and outwardly inclined transition surfaces; ~~and tapered interlocks extending from said sidewalls defining corner spaces in said revetment blocks;~~

said interlocks engaging said corner spaces of revetment blocks of an adjacent row forming a running bond;

said mattress formed of a plurality of rows of said revetment blocks.

36. (original) The revetment mat of claim 35, wherein said plurality of rows are interconnected by at least one cable extending through said plurality of blocks.

37. (original) A revetment block, comprising

a first end and a parallel second end extending between a top and a bottom surface;

a first sidewall and a substantially parallel second sidewall;

said first and said second sidewall each having a first lower vertical surface and a first and a second upper vertical surface;

a first transition extending outwardly between said first lower vertical surface and said

Serial No.: 10/068,324
Atty. Docket: ZL855/02001
Revetment Block and Mat

first upper vertical surface;

a second transition extending inwardly between said first lower vertical surface and said

second upper vertical surface;

said first transition and said first upper vertical surface defining an interlock;

said interlock, said second transition surface, and said second upper vertical surface

defining a corner space.

38. (original) The revetment block of claim 37, said interlock extending outward from said
sidewall normal to said second upper vertical surface.

39. (original) The revetment block of claim 37, said interlock extending outward from said
second upper vertical surface and being tapered.
